

# Effects of Financial Management Reforms on Financial Corruption in Nigeria Public Sector

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## ABSTRACT

This paper examined Financial Management Reforms and its Effect on Curbing Financial Corruption in Nigeria Public Sector. A survey design was adopted in the study and a sample of three hundred and twenty four (324) respondent which consist of Accountants and Auditors from Anambra state MDAs. The variables used for this study consists of dependent and independent variables. The dependent variable for this study is financial management reform proxy as IPSAS, TSA, IPPIS, and GIFMIS. The data generated were subjected to different statistical tests such as descriptive statistics, correlation analysis, jargua-Bera normality test, and auto correlation test. The data gathered were finally analyzed using Ordinary Least Square (OLS) regression analysis. The study found that International Public Sector Accounting Standards (IPSAS and Treasury Single Account (TSA), when tested as standalone variables was found to be positively and statistically significant in curbing financial corruption. While Integrated Payroll and Personnel Information System (IPPIS) and Government Integrated Financial Management Information System (GIFMIS) when tested as standalone variable was found to be positively but insignificantly and negatively but insignificantly curbing financial corruption respectively across public sector in Nigeria. Meanwhile, the t-statistic result of the interaction among these variable showed that their combination can go a long way in curbing financial corruption. The study recommends that, There should be Effective/efficient monitoring, upgrading and sustenance of IPSASs, TSA, IPPIS and GIFMIS in the public sector, if Nigerian government is actually sincere and serious about tackling corruption in the country and stop cases of financial mismanagement, teaming and lading; and prepare financial statements that could make full disclosure of every material facts and figures. This study, been the first and best of its type, makes a two major contributions to knowledge in a way that the variables used were tested as both stand-alone and interactive variables, and the results are quite revealing.

**Key Words:** *Financial Management Reforms (FMR), Corruption, Variables, Ministry Department and Agencies (MDAs)*

## 1. INTRODUCTION:

Corruption is prevalent in every society and Nigeria is not an exception (Tolu & Ogunro, 2012). Different countries including Nigeria have been intensifying efforts to ensure reduction or probably elimination of the act corruption that has eaten so deep into our society. A major challenge faced in an attempt to achieve this, is, ascertaining the measures that will be applied to effectively reduce this plague (Enofe, Afiangbe & Agha, 2017).

Corruption is one of the attributes of poor governance which is highly detrimental to economic and social equity, inadequate or inefficient management of finances. Significantly high corrupt nation are poorer and their rate of growth are lower than the less corrupt ones. Starting from political and administration across the various steps, the level and nature of corruption varies. One of the major hindrances and barriers that disrupts achievements of a nations' set down goals or targets and reduces/minimizes its financial performance, infrastructural development, investment implementation process, wrong investment decision, assets misappropriation, over and under financial

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statement, etc. is associated with corruption (Osakede, Ijimakinwa, Adesanya, Ojo, Ojikutu, & Abubarka, 2015).

For instance in Nigeria, corruption cases are prevalent and its occurrence is with impunity, this is because it has indeed become a society-induced activity in the sense that, it now enjoys popular support from the people, invariably, corruption has been democratized or probably because there is no or little sanction for corrupt practices (Tolu & Ogunro, 2012).

Therefore, under Economic Reforms and Governance Project (ERGP) initiative, signed by the World Bank, the Nigerian government commenced Public Financial Management (PFM) Reforms in 2004, in order to deliver services more efficiently and effectively, strengthen governance and accountability and reduce corruption which forms their major objectives.

In order to curb this issue of corruption, both past and present administration in Nigeria had introduced and

applied different measures and strategies to checkmate and control its activities in order to ensure corruption free economy. e.g.; ICPC, EFCC, Public Procurement Reform, Over-bloated Personal reduction and Monetization to reduce waste

The accountability challenges in Nigeria and Anambra in particular, are as a result of the cases of wrong practices; such as ghost workers on the pay roll of ministries and extra-ministerial departments, fraud, embezzlements and destroying of sensitive office documents, poor budget implementation, and corruption Perpetuation of such financial malpractices and other fraudulent practices, were made more possible (Onuorah & Appah, 2012). Eight hundred and fifty (850) ghost workers were discovered in 2016, this was in a bit to eliminate waste in its expenditure (Governor Obiano in Punch February 12, 2016).

The present administration of President Buhari, in seeking for solutions to curb corruption, through the change agenda, has taken the fight against corruption as one of its major agenda. Full implementation of the TSA mechanism, implementation of IPSAS, IPPIS, E-payment procedure, GIFMIS and full prosecution of officers found to be involved in corruption or corruption practices are some of the tools suggested to be utilized.

Arising from above, the main objective of this study is to investigate the effect of Financial Management Reforms on Curbing Corruption in Nigeria Public Sector. Specific Objectives are:

1. To ascertain the extent to which adoption of International Public Sector Accounting Standard (IPSAS) can curb financial corruption in the Nigeria public sector.
2. To evaluate how the application of Treasury Single Account (TSA) can curb financial corruption in the Nigeria public sector.
3. To determine how Integrated Payroll and Personnel Information System (IPPIS) can curb financial corruption in the Nigeria public sector.
4. To Examine how Government Integrated Financial Management Information System (GIFMIS) can curb corruption in the Nigeria public sector

This paper is presented or divided into five (5) Sections, section two is the review of related Literature, section three consists of the methodology while section four and five comprises the data presentation and analysis.

## 2. REVIEW OF RELATED LITERATURE

### 2.1. Conceptual Framework

**Financial Management Reforms (FMR)** is a set of systems aimed at producing information, processes and rules that can help support fiscal policy making as well as provide instruments for its implementation (IMF e-library). Omolehinwa and Naiyeju (2015) defines Financial Management Reforms as a way of handling, recording and reporting of government financial transaction in public sector. Financial Management Reforms refers to the set of laws, rules systems and processes used by Sovereign nations and sub- national government, to mobilize revenue, allocate public funds, undertake public spending, account for funds and audit results.

Some of these reforms that have been embarked upon by the Nigerian government include: E-payment system, IPPIS, TSA, GIFMIS, Automated Accounting Transaction Recording and Transaction (ATRRS) and the National Chart of Accounts (NCOA). The whole essence or purpose of these Reforms is to eradicate corruption in public sector spending and revenue collection. According to Onuora and Appah (2012) Financial Management Reforms is all about organizing, planning, procurement and utilization of government financial resources as well as formulation of appropriate policies to enable the achievement of societal members' aspirations. It is also concerned with an amendments or improvements on the management of spending, borrowing, revenues, debts, taxation, foreign exchange system, foreign resources, finance auditing and level of liquidity in an economy to enable the achievement of sum stated objectives (Institution of Economic Affairs, 2002). FMR are very crucial because, it enhances prudent allocation of financial capital for the purchase of real capital, leads to optimal management of inventory, cash and development of appropriate dividends policies and enables reorganization of financially troubled organizations.

### Adoption of International Public Sector Accounting Standard (IPSAS)

are a set of accounting standard issued by the IPSAS board for use by public sector entities (e.g. federal, state local government including agencies, boards and commissions) around the world in the preparation of financial statements. It is based on International Financial Reporting Standard (IFRS) which was issued by International Accounting Standard Board (IASB). The standard aimed at improving the Quality of General Purpose Financial Reporting (GPFR) by public sector entities, leading to better informed assessments of the resources allocation decision made by government, thereby increasing transparency and accountability (Otinla, 2015).

In the same vein, Oghoghomeh and Ijeoma (2014) assures that the aim of the adoption, in consonance with the global standards will be beneficial in the improvement of the Countries Accounting and Financial reporting standard. IPSAS adoption will be highly beneficial in the following aspect: improve accountability and transparency, enhance, quality service delivery, increase cross-border investment and foreign direct investment, to enhance fiscal operation report that will increase control of public agencies, secure political and economic leverage, in line with International best practice that will ensure comparability, greater disclosures which provide information for better decision making and in turn should lead to better use of public resources, ensure credibility, integrity that will build confidence in donor agencies, lenders and other stakeholders, and enhance implements of the Freedom Of Information (FOI) Act, 2011).

**Treasury Single Account (TSA)** Oti, Igbeng and Obim (2016) defined Treasury Single Account as a public accounting system under which all government income, receipts and revenue are collected into on singles account, and payment as well and it is usually maintained by the country's central bank. The major aim is to reduce corruption, ensure proper cash management, eliminate idle fund and enhance reconciliation of revenue collection and payment. TSA is a unified structure of government bank accounts enabling optimal utilization and consolidation of

cash resources, through this linked bank accounts, government transacts all its payments and receipts, and get a view of its consolidated cash position at any given time.

For better consolidation of cash balances, Treasury Single Account (TSA) implementation has commenced in various federal government Ministries, Department and Agencies (MDAs) in other to facilitate efficient payment mechanism, ensure absolute, real-time information on government cash resources, prepare reliable and accurate cash flow forecasts, and optimize the cost of government operations. Under TSA, the cash balances is rolled-up to a single account, instead of the use of multiple bank account, payments from all spending units are controlled by TSA. Treasury Single Account (TSA) is a multiple accounts rolled up to a single account, not just a single bank account, it is therefore a unified structure of government bank accounts that gives a consolidated view of government cash resources. It could be one account or a set of linked accounts.

**Integrated Payroll and Personnel Information System (IPPIS)** The problem and issue of ghost workers are often seen as the main source of corruption in many countries. In order to eradicate the ghost workers which seems to be but difficult, Integrated Payroll and Personnel Information System (IPPIS) was established. Integrated Payroll and Personnel Information System (IPPIS) is one of the federal government Financial Management Reforms initiatives aimed at improving the management of human resources and to eliminate fraud in Nigeria Public sector

According to Omolehinwa and Naiyeju (2015) explained that, IPPIS is a centralized computer based payroll and management system aimed at elimination of payroll fraud. It focused on the determination of the actual number of personnel, total cost of salaries at a glance and ensuring data integrity so that the personal information is intact and accurate.

IPPIS department (2015) pointed out that IPPIS had saved the Federal government of Nigeria billions of naira between 2007 to date, as a result of differences on the personal budget and the Actual amount paid by IPPIS for the MDAs. The Integrated Payroll and Personnel Information System (IPPIS) according to Enakirerhi and Temile (2017) is one of the Federal government strategic implementation to digitalize the manual based and files system marred with corruption, inefficiency and inaccuracy of the number of personnel in the civil service of Nigeria.

**Government Integrated Financial Management Information System (GIFMIS)** The GIFMIS is used to support the government in all aspects of budget preparation, execution and management of government financial resources. GIFMIS an information system that cut across financial events and sum up financial information (Felix and Rufus, 2018). It is a set of automation solution that enables government to monitor plan and execute the budget. Omolehinwa and Naiyeju (2015) described GIFMIS in its simple term as an information Technology (IT) based system for budget management and accounting that the Federal government of Nigeria implemented to improve public expenditure management. The aim of government in introducing GIFMIS is to assist in improving the performance, management and outcomes of public financial

management by addressing the vital public financial management lapses and shortcomings which includes; failure to enact the budget before the start of the financial year, lack of effective cash management, lack of integration between different financial management processes and functions and preparation of budget that is not based on realistic forecasts of cash availability.

According to Adedey (2015) GIFMIS are computer-based systems that automate and store key financial information in large organizations like multinational corporations, large non-profit institutions and Government of which the goal is to increase access to information costs depending on the size and needs of the organization using the system. It can be off-the-shelf software or a custom-made system. GIFMIS consists of Budget Preparation, its payroll and pension, Budget execution, Assets management.

### Corruption

Corruption is a term and a worldwide phenomenon that seems to have come to stay, an indomitable perpetual cancer worm. Waziri (2010) etymologically explained that corruption as a word originated from the Greek word "Corruptus" which means an aberration or a misnomer. Different scholars/authors had described and defined corruption using different terminologies. It is as old as human race and its government. It affects all parts of the society and it is a great obstacle and hindrance to social and economic development. It is the most popular discussed issue (Dada, 2014).

According to Dada (2014) Corruption as a concept is difficult to define due to its multidimensional and multidisciplinary nature. A single definition is inadequate to describe the concept appropriately. Corruption takes various forms and contexts, a multifaceted and complex phenomenon with multiple effects and causes. According to Oxford Advanced Learner's Dictionary (2005) Corruption is broadly described as the act or effect of making someone change from moral to immoral standard of behavior; dishonest or illegal behavior especially of people in authority. In this definition corruption is linked with two important variables, morality and authority.

Corruption is the abuse of power for private gain as defined by the World Bank and United Nation (UN) (2012). Fanda (2010) defines Corruption as a change or pervasion from the general accepted laws or rules from selfish gain. Mcshane and Nilsson (2010) noted that Corruption is when a holder of public office motivated by private gain gives preferential treatment that is not officially approved. Dong (2011) defines public section corruption as a misuse of public office for private benefit.

Transparency Intentional defines Corruption as the abuse of entrusted power for private gain. it is the use of official position or public office to obtain personal or private gain, as cited in Enofe, Afiamgbe and Agha (2017). According to Usman (2013) Corruption can also mean theft of public trust, whether the concerned individual is nominated, elected, appointed or selected. It does not count if the person holds office or not, anybody can be corrupt. In his view Agbu (2003) pointed out that public office benefits can be abused through nepotism, patronage, diversion of public resources, theft of state assets, even if no bribery occurred.

## 2.2. Theoretical Framework

This study is anchored on Institutional theory. According to Kraft's Public Policy (2007) Institutional Theory is "Policy-making that emphasizes the formal and legal aspects of government structures." Institutional theory is a theory on the deeper and more resilient aspects of social structure. It considers the processes by which structures, including schemes; rules, norms, and routines, become established as authoritative guidelines for social behavior. Different components of institutional theory explain how these elements are created, diffused, adopted, and adapted over space and time; and how they fall into decline and disuse (Scott, 2004). Rowan examined the growth of three administrative services in California public schools (school health, psychology, and curriculum) from the standpoint of institutional theory. He found that when there is a high level of consensus and cooperation within the institutional environment, diffusion of innovative structures is steady and long-lasting. However, when the institutional environment is contentious and unfocused, adoption of innovative structures is slow and tentative. Tolbert and Zucker extended Rowan's findings by evaluating the rate of adoption of civil service organizations in the United States from 1880-1935. Their results strongly support the institutional theories outlined above. Recent developments in Nigeria public accounting framework are the new accepted behaviours, rules, norms that need to be adhered to and the question prevalent in this theory and applied here is whether these recent reforms (financial management reforms) are due to normative or regulatory practices?

Institutional theory addresses practices of financial management reforms such as IPSAS, TSA, IPPIS and GIFMIS etc., these are the subject of the current trend in the public sector, of which their adoption can enhance the technical efficiency in the organization or institution. Also it results in legitimization of the standard practices, and its absence will leave the organization to be termed negligent, irrational and corrupt. To increase homogeneity in organizational structure within Nigeria MDAs and across countries globally, is the utmost effect of these reforms, therefore this reforms have been thought to promote efficiency, effectiveness, accountability, transparency and curb corruption.

## 2.3. Empirical Framework

Different researchers have conducted researches by using different variables to assess how corruption can be reduced in the Nigeria public sector. In their study Iheduru and Amafulé (2014) examined the use of electronic accounting system (of which GIFMIS and IPPIS are handy) as a tool for checkmating corruption in Nigeria MDAs. The study used both primary and secondary sources for its data collection. The secondary data was used to create a theoretical background for the study while the primary data on the other hand were sourced via a well-structured questionnaire (survey research tool) administered on fourteen (14) selected government-owned ministries (eight federally owned and six state ministries). Participants in the survey consist of five senior staff randomly selected from each of the fourteen ministries, bringing the total sampled respondents to seventy (70). The study reveals that the installation and/or activation of a well-designed electronic accounting information system (such as IPPIS and GIFMIS) in the structure of the nation's public sector operation will amount to a veritable tool in checkmating corruption in the

system and thus serves as a catalyst in engendering economic development in the economy. The study then recommended among other things that the government should embrace and bring to bear a well-designed e-accounting information system to cover such areas like budgeting system (from formulation, approval, implementation, disbursement, etc.) which is addressed by GIFMIS, payrolls which is addressed by IPPIS, pensions matters also addressed by IPPIS, and others.

Enofe, Afiangbe and Agha (2017) examined financial management reforms and corruption in Nigeria public sector. A survey research design was adopted in the study and a sample of ninety (90) respondents which consist of 40 staff from federal MDAs, 30 from Edo state MDAs and 20 from local government MDAs. The study employed ordinary least square (OLS), using SPSS in analyzing the bio-data and Eview8 in analyzing the research questions as the statistical technique or tool. The study found that Treasury Single Account (TSA); adoption of International Public Sector Accounting Standards (IPSAS); and Government Integrated Financial Management Information System (GIFMIS) all had a positive relationship with Corruption (COR) but at different level of significance while Integrated Payroll and Personnel Information System (IPPIS) had a negative relationship. In their recommendation the government was advised to implement IPPIS to its fullest to enhance its potentials of corruption reduction.

Osakede, Ijimakinwa, Adesanya, Ojo, Ojikutu, and Abubarka (2015) studied Corruption in the Nigeria Public Sector: an Impediment to Good Governance and Sustainable Development. The paper used qualitative approach to analyses issues by adopts secondary data, the paper observes that Nigeria is faced with myriad of dilemmas Prominent among which are poverty, insecurity, kidnapping, ethno-religious crisis, bad governance, and many more, these problems can be attributed to corruption. they suggests that government should urgently initiate moves to work with the National Assembly to review Nigeria constitution and legal order so as to empower the anti-corruption agencies to work assiduously without being molested or interfered with by the government. It was concludes that entrenchment of constitutional principle that will allow citizens in their respective constituencies the power to recall at any point in time any elected official who has been found by due process to corrupt, abuse or betray the people mandate.

Nweze (2013) observes that adoption and proper implementation of IPSAS would create avenue for reduction in case of manipulation of financial resources in the public sector since one of the objectives of IPSASs is to engender transparency and accountability in the operation of public entities. It was also added that full and proper implementation of IPSAS pave way for Related Party Disclosure which by extension check cases of corruption through effective, efficient, and transparent financial reporting in Nigeria MDAs and curb corruption. Enakirerhi and Temile (2017) Accurate and reliable personnel information, reduction or elimination of corrupt and sharp practices, facilitation of modern scientific and accurate budgeting and forecasting are the major benefits of IPPIS. Weeding out ghost workers and saving billions in cost to the economy through the implementation of the IPPIS (Idris, Adaja & Audu, 2015), & Mede, 2016). Felix, and Rufus,

(2018), Akhalumeh and Ohiokha (2018) noted that with GIFMIS, there has been an appreciable reduction in corruption, financial irregularities and leakages with the attendant improvement in transparency and accountability in the management of government funds.

**3. METHODOLOGY**

This paper was a Survey Research and adopts a primary approach in gathering its data. These questions were structured on a five point likert scale, thus: Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD). The population of the study comprise of four hundred and thirty six (436) Accountants and Auditors in Anambra state MDAs. The sampling was done by using

Stratified Random technique. The study considered a total number of nineteen MDAs in Anambra state. Sample size of three hundred and twenty four (324) Respondents from Accountants and Auditors MDAs in Anambra state. The study employed ordinary least square (OLS) regression analysis, with the aid of Eview software 8.0; we therefore subjected our data to a diagnostic test using descriptive statistics analysis, to further check for the normality of our variables, a Jarque-Bera normality test was used, in examining the association among the variables, we employed the Pearson correlation coefficient (correlation matrix), to examine the impact relationships between the dependent variables (CORUP) and our independent variables and to also test our formulated hypotheses, we used Multicollinierity test

**Model Specification**

The following models were formulated for this study:

**Model 1**

$$COR_i = \lambda_0 + \lambda_1 IPSAS_i + \lambda_2 TSA_i + \lambda_3 IPPIS_i + \lambda_4 GIFMIS_i + \mu \dots \dots \dots (1)$$

**Model 2**

$$COR_i = \lambda_0 + \lambda_1 IPSAS_i * \lambda_2 TSA_i + \lambda_3 IPPIS_i * \lambda_4 GIFMIS_i + \lambda_3 IPSAS_i * \lambda_4 IPPIS_i + \lambda_3 TSA_i * \lambda_4 GIFMIS_i + \mu \dots \dots \dots (2)$$

Where:

- IPSAS= International Public Sector Accounting Standard
- TSA= Treasury Single Account
- IPPIS= Integrated Payroll and Personnel Information System
- GIFMIS= Government Integrated Financial Management Information System
- $\lambda_0$  = constant
- Parameters:  $\lambda_1, \lambda_2, \lambda_3, \lambda_4$  represent the co-efficient.
- Apriority sign:  $\lambda_1 < 0, \lambda_2 < 0, \lambda_3 < 0, \lambda_4 < 0$

**4. PRESENTATION AND ANALYSIS OF DATA**

**4.1. Presentation of Data**

In this study in which we investigated the financial management reform and curbing corruption in Nigeria public sector, data were generated through the administration of questionnaire to our respondents. The data generated is presented as appendix 1. In other to ensure the validity and the reliability of our data, we therefore subjected our data to a diagnostic test using descriptive statistics analysis and the result of our test is presented in our table 1.

**Demographic Analysis of Respondents**

**Table 4.1.1: Respondents Sex Distribution**

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Male	168	51.9	51.9	51.9
Female	156	48.1	48.1	100
Total	324	100	100	

*Source: Researcher's field work/computation (2019).*

The table 4.1.1 above shows that 168 of the respondents were male while 156 were female given a percentage of 51.9% and 48.1% respectively.

**Table 4.1.2: Respondents Age Distribution**

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
20-25	32	9.9	9.9	9.9
26 - 30	68	21.0	21.0	30.9
31 - 35	64	19.8	19.8	50.7
36 - 40	87	26.8	26.8	77.5
40 & above	73	22.5	22.5	100
Total	324	100	100	

*Source: Researcher's field work/computation (2019).*

Above table shows the age distribution of the respondents. 32 of the respondents representing 9.9% of the total respondents were between the ages of 20-25 years, 68 were between 26-30 years, 64 were between 31-35 years, 87 were between 36 - 40 while 73 respondents were 41 years and above. This represents 21.0%, 19.8%, 26.8% and 22.5% respectively.

**Table 4.1.3: Educational Qualification Distribution**

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
ND/NCE	43	13.3	13.3	13.3
B.Sc/B.A	196	60.5	60.5	73.8
M.Sc/PhD	64	19.7	19.7	93.5
Others	21	6.5	6.5	100
Total	324	100	100	

Source: Researcher’s field work/computation (2019).

The Table above shows the educational qualification distribution of the respondents and its percentages.

**Table 4.1.4: Employment/Professional Status Distribution**

	Frequency	Percentage	Valid Percentage	Cumulative Percentage
Local Government Auditor	96	29.6	29.6	29.6
State Government Auditor	43	13.3	13.3	43.9
Accountant	185	57.1	57.1	100
Total	324	100	100	

Source: Researcher’s field work/computation (2019).

Table above shows the employment status of the respondents. 36 respondents were under the employment of the local government, 207 were under state government employment while 81 were federal government employees. This represent 11.1%, 63.9% and 25.0% respectively.

**Table 4.1.5: DESCRIPTIVE STATISTICS OF OUR VARIABLES**

	COR	IPSAS	TSA	IPPIS	GIFMIS
Mean	68.40000	68.40000	68.40000	68.40000	68.40000
Median	59.50000	49.50000	73.50000	78.50000	82.50000
Maximum	147.0000	201.0000	137.0000	206.0000	109.0000
Minimum	4.000000	2.000000	4.000000	3.000000	0.000000
Std. Dev.	46.38670	60.88592	39.83439	48.63440	34.57471
Skewness	0.139332	0.785306	-0.152455	0.779325	-1.095996
Kurtosis	1.749152	2.578956	2.286387	4.254929	2.718542
Jarque-Bera	1.368561	2.203414	0.501845	3.336866	4.070043
Probability	0.050445**	0.0332303**	0.778083	0.0188542**	0.0130678**
Sum	1368.000	1368.000	1368.000	1368.000	1368.000
Sum Sq. Dev.	40882.80	70434.80	30148.80	44940.80	22712.80
Observations	20	20	20	20	20

Source: Researcher’s computation (2019): Note \*1% level of significance, \*\*5% level of significance, \*\*\*10% level of significance.

Table 4.1.5 shows the mean (average) for each of the variables, their maximum values, minimum values, standard deviation and Jarque-Bera (JB) statistics (normality test). The result in Table 4.1.6 provides some insight into the nature of the selected variables used in this study. Firstly, the large difference between the maximum and minimum values of IPPIS, IPSAS, TSA and GIFMIS showed that most of our respondents were of the opinion that financial management reforms proxy as, IPSAS, TSA, IPPIS and GIFMIS with the values of (201,0000, 137,0000, 206,0000 and 109,0000 respectively) can bring about change in the level of financial corruption in Nigeria public sector. The table also shows that most of our respondents were of the opinion that on the average, IPSAS, TSA, IPPIS and GIFMIS when jointly applied can result to about 68.4% reduction in financial corruption in public sectors in Nigeria. This is quite encouraging and therefore justifies the reason for this study as we expect that IPSAS, TSA, IPPIS and GIFMIS when jointly applied in the system will help to curb financial corruption in Nigeria. We also observed that on the average IPSAS value was 68.40000, the maximum value was 201.0000 while the minimum stood at 2.000000. This shows that most respondents were of the opinion that financial management reform through IPSAS can curb about 68.4% financial corruption in public sector in Nigeria. Similarly, TSA variable, with the average value of 368.40000, maximum value of 137.0000 and minimum value of 4.000000, is an indication that on the average, most respondents interviewed were of the opinion that the introduction of TSA in the Nigeria public sector can bring about reduction in the level of financial corruption to about 68.4%. Similarly, IPPIS and GIFMIS were found to be same as others earlier discussed in reducing financial corruption in the public sectors in Nigeria.

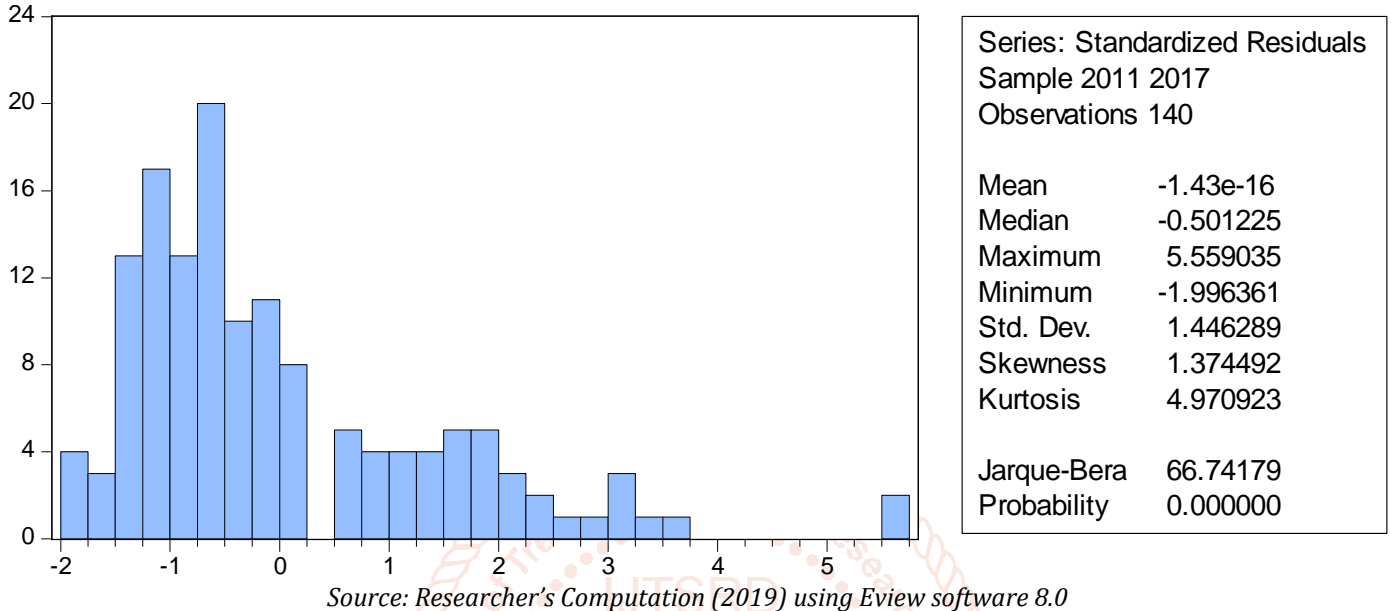
Furthermore, the table also shows a wide variation of standard deviation values of IPSAS, TSA, IPPIS and GIFMIS to be 60.88592, 39.83439, 48.63440 and 34.57471 respectively. This implies that perception of the respondents as regards to financial management reforms are widely spread among the variables used for this study and that none of the variables dominated the opinion of the respondents.

Lastly, in Table 4.1.5, the Jarque-Bera (JB) which test for normality or the existence of outlier or extreme values among the variables shows that most of the variables used for this study are normally distributed at 5% level of significance except TSA. Hence indicating the absence of outliers, thus suitable to be analyzed using Ordinary Least Square regression method or Generalized Least Square Panel Regression method and the result fit for generalization in the system.

**4.2. Further Test to Proof Normality Nature of our Data**

To further check for the normality of our data gathered, a deeper Jarque-Bera normality test was subjected on our data gathered for this study to test its fit for the study and the result is presented as a graph in figure 1 below.

**Fig. 4.2.1: Graph Presentation of Jargue- Bera Deeper Normality Test Result**



The graph result above shows that the variables used for this study, with the Jargue-Bera value of 66.74179 and probability value of 0.00, are normally distributed at 1% level of significance and therefore fit to be used for this study.

**4.3. Correlation Analysis**

In examining the association among the variables, we employed the Pearson correlation coefficient (correlation matrix) and the results are presented in Table 4.3.1.

**Table 4.3.1: Pearson Correlation Matrix of the both Explanatory and Dependent Variables Used for the Study.**

	COR	IPSAS	TSA	IPPIS	GIFMIS
COR	1.00	0.94	0.84	0.76	0.67
IPSAS	0.94	1.00	0.73	0.74	0.51
TSA	0.84	0.73	1.00	0.59	0.80
IPPIS	0.76	0.74	0.59	1.00	0.64
GIFMIS	0.65	0.51	0.80	0.64	1.00

*Source: Researcher's computation (2019)*

The use of correlation matrix in most regression analysis is to check for multi-collinearity and to explore the association between the explanatory variables and the dependent variable. Table 4.3.1 focuses on the correlation between financial corruption, proxy as COR and the independent variables which include, IPSAS, TSA, IPPIS and GIFMIS. The findings from the correlation matrix table shows that most of our explanatory variables were positively and moderately correlated with our dependent variable, (COR, TSA=0.84: COR, IPPIS=0.73; and COR; GIFMIS=0.65 except IPSAS which shows strong and positive correlation with COR at 0.94. However, no two explanatory variables are perfectly correlated, which would have resulted into dropping of one of such explanatory variable. Therefore, in checking for multi-collinearity, we notice that no two explanatory variables were perfectly correlated. This means that there is the absence of multi-collinearity problem in our model. Multi-collinearity between explanatory variables may result to wrong signs or implausible magnitudes in the estimated model coefficient, and the bias of the standard errors of the coefficients.

**4.4. Testing of Specific Objectives Formulated for this Study**

In order to test our specific objectives for this study, the generated data were analyzed and presented hereunder. Notably, out of the three hundred and twenty eight copies of questionnaire administered, four copies were not returned; hence, the returned copies which represent 98.8% response rate were used for the data analysis. The results are as shown in the tables below;

**4.4.1. Analysis of Specific Objective One: International Public Sector Accounting Standards (IPSAS) and Financial Corruption in Nigeria.****Table 4.4.1: IPSAS adoption and curbing Financial Corruption**

a.		SA 5	A 4	U 3	D 2	SD 1	N	$\bar{x}$	Decision
i.	The adoption of IPSAS will enhance comparability and international best practice	105	186	2	32	17	342	3.42	Accept
ii.	The adoption of IPSAS will increase the level of accountability and transparency in public sector in Nigeria.	96	151	8	59	28	342	3.42	Accept
iii.	Adoption of IPSAS will ensure credibility and integrity that will build confidence in donor agencies, lenders and other stakeholders	98	201	3	30	10	342	3.42	Accept
iv.	Adoption of IPSAS will enhance public –private partnership	87	117	17	81	40	342	3.42	Accept

Source: Field Survey, 2019.

Table 4.4.1 addressed the IPSAS adoption and curbing financial corruption among workers in public sectors in Nigeria. The table reveals that the IPSAS adoption will enhance comparability of records as well as instituting international best practices in public sectors in Nigeria as indicated by the mean rating of 3.42. The respondents were of the opinion also that IPSAS adoption will increase the level of accountability and transparency of accounting records, ensures credibility integrity of financial records which will result into boosting the confidence of agency donors in Nigeria as well as enhancing more public- private partnership relationships among public sectors in Nigeria, as their mean rating was 3.42 in all, as shown above in table 4.4.1, which is above the mean average of 3.0. Therefore, the results indicate that to a great extent, that IPSAS adoption in public sector in Nigeria will result into more financial records comparability, more accountability, more credibility and integrity of records and will encourage more public –private partnership relationship among public sectors in Nigeria.

**4.4.2. Analysis of Objective Two: Treasury Single Account (TSA) and Financial Corruption in Nigeria****Table 4.4.2: Adoption of Treasury Single Account (TSA) and Financial Corruption in Nigeria**

a.		SA 5	A 4	U 3	D 2	SD 1	N	$\bar{x}$	Decision
i.	TSA will reduce idle cash balance that is often accumulated in accounts of Ministries, Departments and Agencies (MDAs) in commercial banks by investing any surplus.	101	86	8	78	69	342	3.42	Accept
ii.	TSA will ensure effective monitoring and reconciliation of government accounts.	94	137	4	57	50	342	3.42	Accept
iii.	TSA will enthrone centralized, transparent and accountable revenue management.	86	99	11	81	65	342	3.42	Accept
iv.	TSA will help eliminate operational inefficiency and costs associated with maintaining multiple accounts across multiple financial institutions.	102	136	6	48	50	342	3.42	Accept

Table 4.4.2 addressed the perception of respondents on the adoption of treasury single account (TAS) and curbing financial corruption in public sectors in Nigeria and the result shows that adoption of TSA in public sectors in Nigeria will mop up excess cash balances often accumulated in accounts of MDAs in Nigeria as its mean rating is 3.42, which is above the average mean of 3.0. The table also shows that adoption of TSA in public sector in Nigeria will also ensure effective monitoring reconciliation of government account, enthrone centralized, transparent and accountable revenue management, and will also help to eliminate operational inefficiencies and cost associated with maintaining multiple accounts across multiple financial institutes, as their average value is 3.42, which is above the mean rating of 3.0 as shown in table 4.

**4.4.3. Analysis of Specific Objective Three: Integrated Payroll and Personnel Information System (IPPIS) and Financial Corruption in Nigeria Public Sectors****Table 4.4.5: Adoption of Integrated Payroll and Personnel System (IPPIS) and Financial Corruption in Nigeria**

a.		SA 5	A 4	U 3	D 2	SD 1	N	$\bar{x}$	Decision
i.	IPPIS is a necessity in the operations of government payroll in this modern era.	79	84	7	79	93	3442	3.42	Accept
ii.	IPPIS will eliminate payroll fraud such as multiple payment of emoluments to single employee or payment of monthly salary to a non-existent employee.	76	110	20	41	95	342	3.42	Accept
iii.	IPPIS will enhance prompt deduction and remittance to accounts of all third parties payments such as Pension Fund Administrators (PFAs), National Health Insurance Scheme (NHIS), Pay As You Earn (PAYE),	103	206	3	16	14	342	3.42	Accept
iv.	IPPIS is yet to be fully in operation in most government Ministries, Departments and Agencies (MDA).	78	70	12	84	98	342	3.42	Accept

Source: Field Survey, 2019.



Table 4.4.3 treats the perception of respondents on the adoption of Integrated Payroll and Personnel Information System (IPPIIS) and curbing financial corruption in public sectors in Nigeria and the result shows that adoption of IPPIS in public sectors in Nigeria is a necessity in the operation of government payments in this modern era, as its mean rating is 3.42, which is above the average value of 3.0. The table also shows that adoption of IPPIS in public sectors in Nigeria will eliminate frauds such as multiple payment of emoluments to a single employee and also enhance prompt deductions and remittance to accounts of third parties. However, majority of our respondents were of the opinion that IPPIS is yet to be fully implemented in most public sectors in Nigeria.

**4.4.4. Analysis of Specific Objective Four: Government Integrated Financial Management Information System (GIFMIS) and Financial Corruption in Nigeria Public Sectors**

**Table 4.4.4: Adoption of Government Integrated Financial Management Information System (GIFMIS) on Financial Corruption in Nigeria**

a.		SA 5	A 4	U 3	D 2	SD 1	N	x	Decision
i.	In this modern era, GIFMIS is a necessity in the operations of government activities and financial management.	75	86	7	78	96	342	3.42	Accept
ii.	The apparent lack of accountability and corruption perpetrated by some public office holders is linked to the absence of a well-designed GIFMIS in the operational structure of the nation's public sector financial management.	67	93	5	84	93	342	3.42	Accept
iii.	The installation of a well-designed electronic accounting information system such as GIFMIS in the nation's public sector financial management can checkmate corruption in the economy.	88	91	9	65	89	342	3.42	Accept
iv.	The present operation of the Nigerian public sector has not fully activated electronic accounting information dissemination approach such as GIFMIS in the entire financial management system.	81	109	0	56	96	342	3.42	Accept

Source: Field Survey, 2019.

Table 4.4.4 investigated the perception of respondents on the adoption of Government Integrated Financial Management Information System (GIFMIS) and curbing financial corruption in public sectors in Nigeria and the result shows that adoption of GIFMIS in public sectors in Nigeria is a necessity in the operation of government activities in this modern era, as its mean rating is 3.42, which is above the average value of 3.0. The table also shows that lack of accountability and corruption perpetrated by some public office holders is linked to absence of a well-designed GIFMIS in public sectors in Nigeria. Similarly, the table also shows that installation of GIFMIS can help to checkmate corruption in public sectors. However, majority of our respondents were of the opinion that GIFMIS is yet to be fully implemented in most public sectors in Nigeria.

**4.5. Test of Hypotheses Formulated**

However, to examine the impact relationships between the dependent variables (CORUP) and our independent variables and to also test our formulated hypotheses, we used an Ordinary Least Square (OLS) regression analysis. The panel interaction based OLS regression results obtained is presented and discussed below while detailed result is presented as appendix 2.

**4.5.1. MODEL 1**

$$COR_i = \lambda_0 + \lambda_1 IPSAS_i + \lambda_2 TSA_i + \lambda_3 IPPIS_i + \lambda_4 GIFMIS_i + \mu \dots \dots \dots (1)$$

Model 1 formulated was analyzed using both Ordinary Least Square Regression Method and Fixed Effect Regression Method and the results displayed by both methods were the same (see appendix 2 for the detailed result). However, for the purpose of this study, we interpreted the Ordinary Least Square (OLS) result as this is presented in table 4.5.1.

**Table 4.5.1: COR Regression Result**

Dependent Variable: COR				
Method: Panel Least Squares				
Date: 05/27/19 Time: 14:58				
Sample: 2015 2019				
Periods included: 5				
Cross-sections included: 4				
Total panel (balanced) observations: 20				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.749839	5.449424	1.605645	0.1343
IPSAS	0.467065	0.081595	5.724200	0.0001
TSA	0.456312	0.155373	2.936884	0.0124
IPPIS	0.090349	0.086643	1.042777	0.3176
GIFMIS	-0.141649	0.182601	-0.775726	0.4529

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.972387	Mean dependent var	68.40000
Adjusted R-squared	0.956279	S.D. dependent var	46.38670
S.E. of regression	9.699217	Akaike info criterion	7.671142
Sum squared resid	1128.898	Schwarz criterion	8.069435
Log likelihood	-68.71142	Hannan-Quinn criter.	7.748893
F-statistic	60.36822	Durbin-Watson stat	2.211562
Prob(F-statistic)	0.000000		

Source: Researchers computation (2019): Note: \* 1%, \*\* 5%, \*\*\*10% level of significance

In testing for cause-effect relationship between the dependent and independent variables in COR model, we reported the OLS pooled regression results in Table 4.5.1. In table 4.5.1, we observed that from the COR result, the R-squared and adjusted R-squared values were 0.97 and 0.96 respectively. This indicates that all the independent variables jointly explain about 97% of the systematic variations in financial corruption measured as COR of our variables.

**Test of Autocorrelation:** Using Durbin Watson (DW) statistics which we obtained from our regression result in table 4.5.1, it is observed that DW statistic is 2.211562 which is approximately 2, agrees with the Durbin Watson rule of thumb. Showing that our data is free from autocorrelation problem and as such fit for the regression result to be interpreted and result relied on. Akaike Info Criterion and Schwarz Criterion which are 7.671142 and 8.069435 respectively further strengthen the fitness of our regression result for reliability as they confirm the goodness of fit of the model specified. In addition to the above, the specific findings from each explanatory variable are provided as follows:

**Integrated Public Sector Accounting Standards(IPSAS) and Financial Corruption in Nigeria Public Sector,** based on the t-statistics value of 5.724200 and p-value of 0.00 was found to have a positive influence on financial corruption and this influence is statistically significant since its p-values is less than 0.05. This therefore suggests that we should reject hypothesis one (Ho<sub>1</sub>) which states that the adoption of International Public Sector Accounting Standard (IPSAS) cannot significantly curb financial corruption, to accept our alternative hypothesis. This means that on the basis of the use of financial reforms to curb financial corruption in Nigeria public sector, the introduction of IPSAS in the system is perceived to have a positive significant effect, thereby will help to curb financial corruption in the system.

**Treasury Single Account (TSA) and Financial Corruption in Nigeria Public Sector,** based on the t-statistics value of 2.936884 and p-value of 0.012 was found to have a positive significant influence on financial corruption. And this influence is statistically significant at 5% level as the p-values is more than 0.05. This therefore suggests that we should reject hypothesis two (Ho<sub>2</sub>) which states that the adoption of the Treasury Single Account (TSA) can significantly curb financial corruption. This means that on the basis of that use of TSA to curb financial corruption in Nigeria public sector, the introduction of TSA in the system has a positive and significant effect, thereby perceived to help to curb financial corruption in the system. This might be true in the sense that since its inception, TSA has help to mop up excess cash float in MDAs, enhance effective monitoring and reconciliation of government revenues, and reduce operational inefficiency and cost associated with keeping multiple accounting systems. This means that on the basis of the use of financial reforms to curb financial corruption in Nigeria public sector, the introduction of TSA in the system is perceived to have a positive significant effect, thereby will help to curb financial corruption in the system.

**Integrated Payroll and Personnel Information System(IPPIS) and Financial Corruption (COR),** based on the t-statistics value of 1.042777 and p-value of 0.32 was found to have a positive influence on financial corruption(COR).However, this influence is not statistically significant since its p-values is more than 0.10. This therefore suggests that we should accept our null hypothesis three (Ho<sub>3</sub>) which states that Integrated Payroll and Personnel Information System (IPPIS) cannot significantly curb financial corruption. This means that on the basis of the use of financial reforms to curb financial corruption in Nigeria public sector, IPPIS is perceived to have no significant effect and thus its introduction does not helps to reduce financial corrupt practices in Nigeria public sector.

**Government Integrated Financial Management Information System(GIFMIS) and Financial Corruption (COR),** based on the t-statistics value of -0.775226 and p-value of 0.45 was found to have a negative influence on financial corruption(COR).However, this influence is not statistically significant since its p-values is more than 0.10. This therefore suggests that we should accept our null hypothesis four (Ho<sub>4</sub>) which states that Government Integrated Financial Management Information System cannot significantly curb financial corruption. This means that on the basis of the use of GIFMIS to curb financial corruption in Nigeria public sector, GIFMIS is perceived to have no significant effect and thus its introduction does not helps to reduce financial corrupt practices in Nigeria public sector.

**4.5.2. MODEL 2: Interaction Model**

To test the variables we interacted in our model 2, which we specified in chapter three as follows:  

$$COR_i = \lambda_0 + \lambda_1 IPSAS_i + \lambda_2 TSA_i + \lambda_3 IPPIS_i + \lambda_4 GIFMIS_i + \lambda_5 IPSAS_i * \lambda_6 IPPIS_i + \lambda_7 TSA_i * \lambda_8 GIFMIS_i \mu \dots \dots \dots (2)$$

We used multiple regression analysis which we conducted with the data gathered for this study to investigate the joint effect of our variables on curbing financial corruption in public sectors in Nigeria and the result is presented in table 8 while the detailed result is presented as an appendix 3.

**Table 4.5.2: Interaction of Financial Reform variables used for this Study**

Cross-sections included: 4				
Total panel (balanced) observations: 20				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	24.37090	13.39631	1.819225	0.0865
IPSAS*TSA	0.005704	0.000733	7.784062	0.0000
IPPIS*GIFMIS	0.001367	0.000902	1.515326	0.1481
IPSAS*IPPIS	0.002416	0.000426	5.675045	0.0000
TSA*GIFMIS	0.005723	0.000989	5.785610	0.0000

In table 8, the financial reform variable used for this study which includes IPSAS, TSA, IPPIS, and GIFMIS were interacted and the results obtained were as follows:

**Interaction Between Integrated Public Sector Accounting Standards (IPSAS) and Treasury Single Account and Financial Corruption in Nigeria Public Sector (IPSAS\*TSA)** based on the t-statistics value of 7.784062 and p-value of 0.00 was found to have a positive influence on financial corruption and this influence is statistically significant at 1% level since its p-values is within 0.00. The implication of this result is that when trying to look for financial reforms that can bring instant reduction in financial corruption of a system, a combination of the use of IPSAS and TSA should be used as its combination can go a long way in curbing financial corruption in a system. Therefore, on the basis of the use of financial reforms to curb financial corruption in Nigeria public sector, the introduction of IPSAS and TSA jointly in such a system have a positive significant effect, thereby will help to curb financial corruption in such a system.

**Interaction between Integrated Payroll and Personnel Information System (IPPIS) and Government Integrated Financial Management Information System (GIFMIS), and Financial Corruption in Nigeria Public Sector (IPPIS\*GIFMIS)**, based on the t-statistics value of 1.515326 and p-value of 0.15 was found to have a positive influence on financial corruption. Although, this influence is not statistically significant in influencing financial corruption in Nigeria as its p-values is more than 10%.

The implication of this result is that when trying to look for financial reforms that can bring instant reduction in financial corruption of a system, a combination of IPPIS and GIFMIS should not be used alone as its combination cannot reduce financial corruption in a system, alone, even though they have positive influence on it. Therefore, on the basis of the use of financial reforms to curb financial corruption in Nigeria public sector, the introduction of IPPIS and GIFMIS will not give a statistically significant result in curbing financial corruption in the system.

**Interaction Between International Public Sector Accounting Standards (IPSAS) and Integrated Payroll and Personnel Information System (IPPIS), and Financial Corruption in Nigeria Public Sector (IPSAS\*IPPIS)**, based on the t-statistics value of 5.675045 and p-value of 0.00 was found to have a positive influence on financial corruption and this influence is statistically significant at 1% level since its p-values is within 0.00. The implication of this result is that when trying to look for financial reforms that can bring instant reduction in financial corruption of a system, a combination of IPSAS and IPPIS should be used as its combination can go a long way in curbing financial corruption in a system. Therefore, on the basis of the use of financial reforms to curb financial corruption in Nigeria public sector, the introduction of IPSAS and IPPIS jointly in such a system have a positive significant effect, thereby will help to curb financial corruption in such a system.

**Interaction Between Treasury Single Account (TSA) and Government Integrated Financial Management Information System (GIFMIS) and Financial Corruption in Nigeria Public Sector (TSA\*GIFMIS)**, based on the t-statistics value of 5.785610 and p-value of 0.00 was found to have a positive influence on financial corruption and this influence is statistically significant at 1% level since its p-values is within 0.00. The implication of this result is that when trying to look for financial reforms that can bring instant reduction in financial corruption of a system, a combination of TSA and GIFMIS should be used as its combination can go a long way in curbing financial corruption in a system. Therefore, on the basis of the use of financial reforms to curb financial corruption in Nigeria public sector, the introduction of TSA and GIFMIS jointly in such a system have a positive significant effect, thereby will help to curb financial corruption in such a system.

#### 4.6. Discussion of Results

This study investigated the financial management reform and curbing financial corruption in Nigeria public sector. Using pooled data, the data generated were subjected to different statistical tests such as descriptive statistics, correlation analysis, jargua-Bera normality test, and auto correlation test. The data gathered were finally analyzed using ordinary Least Square (OLS) regression analysis. The descriptive statistics revealed the individual characteristics of the variables used in this study were normally distributed while the regression results obtained were as follows:

#### **International Public Sector Accounting Standards (IPSAS) and Financial Corruption in Nigeria Public Sector,**

The Ordinary Least Square result shows that International Public Sector Accounting Standards (IPSAS) have a positive influence in curbing financial corruption among public sectors in Nigeria. This finding supports our apriori expectation as we expect that the introduction of IPSAS into public sector management in Nigeria will lead to the curbing of financial corruption in the system. Also this findings agrees with the findings of Enofe, Afiamghe and Agha (2017),

Ijeoma and Oghoghohomeh (2014), Ademola, Adegoke, and Oyeleye, (2017). Similarly, when we went further to interact IPSAS with other financial reform variables such as Treasury Single Account (IPSAS\*TSA) on one hand and Integrated Payroll and Personnel Information System (IPSAS\*IPPIS) on the other hand, the results still shows that they both had significant positive effect in curbing financial corruption in the system.

#### **Treasury Single Account (TSA) and Financial Corruption in Nigeria Public Sector,**

Furthermore, our Ordinary Least Square result also shows that Treasury Single Account (TSA) have a positive influence in curbing financial corruption among public sectors in Nigeria. This finding supports our a priori expectation as we expect that the introduction of TSA into public sector management in Nigeria will lead to the curbing of financial corruption in the system. More so this findings agrees with the findings of Enofe, Afianghe and Agha (2017), Akujuru and Enyioko (2017). Similarly, when we went further to interact TSA with other financial reform variables such as International Public Sector Accounting Standards (IPSAS\*TSA) on one hand and Government Integrated Financial and Management Information System (TSA\*GIFMIS) on the other hand, the results still shows that they both had significant positive effect in curbing financial corruption in the system.

#### **Integrated Payroll and Personnel information System (IPPIS) and Financial Corruption in Nigeria Public Sector,**

In addition, the regression result also shows that Integrated Payroll and Personnel Information System (IPPIS) have a positive but insignificant influence in curbing financial corruption among public sectors in Nigeria. This finding disagrees with our a priori expectation as we expect that the introduction of IPPIS into public sector management in Nigeria will lead to the curbing of financial corruption in the system. Also this finding agrees with the findings of Idris, Adaja and Audu (2015), Enakirerhi and Temile (2017), Mede (2016). And negates the findings of Enofe, Afianghe and Agha (2017). Similarly, when we went further to interact IPPIS with other financial reform variables such Government integrated Financial Management Information System (IPPIS\*GIFMIS), the result still shows insignificant positive effect on curbing financial corruption in the system.

#### **Government Integrated Financial and Management Information System (GIFMIS) and Financial Corruption in Nigeria Public Sector,**

Finally, the Ordinary Least Square result also shows that Government Integrated Financial and Management Information System (GIFMIS) have a negative but insignificant influence in curbing financial corruption among public sectors in Nigeria. This finding negates our a priori expectation as we expect that the introduction of GIFMIS into public sector management in Nigeria will lead to the curbing of financial corruption in the system. Also this findings agrees with the findings of Kerr and Houghton (2014), Felix and Rufus, (2018), Akhalumeh and Ohiokha (2018), Odoyo, Adero and Chumba (2014). And negates the findings of Bwalya and Mutula (2016) Similarly, when we went further to interact GIFMIS with other financial reform variables such as Treasury Single Account (TSA\*GIFMIS) on one hand and Integrated Payroll and Personnel Information System

(IPPIS\*GIFMIS) on the other hand, the results shows that the interaction between TSA and GIFMIS had a significant positive effect on curbing financial corruption in the system while on the other hand, the interaction between IPPIS and GIFMIS even though it came out positive, had an insignificant influence in curbing financial corruption across public sector in Nigeria.

### **5. SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION**

#### **5.1. Summary of Findings**

In this study, we investigated the financial management reform and curbing financial corruption in Nigeria public sector. The variables used for this study consists of dependent and independent variables. The dependent variable for this study is financial management reform proxy as IPSAS, TSA, IPPIS, and GIFMIS. Using pooled data, the data generated were subjected to different statistical tests such as descriptive statistics, correlation analysis, jargue-Bera normality test, and auto correlation test. The data gathered were finally analyzed using Ordinary Least Square (OLS) regression analysis. The descriptive statistics revealed the individual characteristics of the variables used in this study are normally distributed while the regression results obtained were as follows:

- A. International Public Sector Accounting Standards (IPSAS)** when tested as standalone variable was found to be positively and statistically significant in curbing financial corruption across public sector in Nigeria. Also, the interaction result, in model 2, shows that International Public Sector Accounting Standards (IPSAS) interaction with Treasury Single Account (IPSAS\*TSA) and Integrated Payroll and Personnel Information System (IPSAS\* IPPIS) to be positive and statistically significant in curbing financial corruption in Nigeria.
- B. Treasury Single Account (TSA)** when tested as standalone variable was found to be positively and statistically significant in curbing financial corruption across public sector in Nigeria. Also, the interaction result, in model 2, shows that Treasury Single Account (TSA) interaction with International Public Sector Accounting Standards (IPSAS) (IPSAS\*TSA) and with Government Integrated Financial Management Information System (TSA\* GIFMIS) to be positive and statistically insignificant in curbing financial corruption in the public sector in Nigeria.
- C. Integrated Payroll and Personnel Information System (IPPIS)** when tested as standalone variable was found to be positively but insignificantly curbing financial corruption across public sector in Nigeria. However, the interaction result, in model 2, shows that Integrated Payroll and Personnel Information System (IPPIS) interaction with International Public Sector Accounting Standards (IPSAS\*IPPIS) had a positive and statistically significant effect in curbing financial corruption in Nigeria while its interaction with Government Integrated Financial Management Information System (IPPIS\*GIFMIS) is found not to be statistically significant, though it has a positive influence too.
- D. Government Integrated Financial Management Information System (GIFMIS)** when tested as standalone variable was found to be negatively but insignificantly curbing financial corruption across public

sector in Nigeria. However, the interaction result, in model 2, shows that Government Integrated Financial Management Information System (GIFMISS) interaction with IPPIS (IPPIS\*GIFMIS) had a positive but statistically insignificant effect in curbing financial corruption in Nigeria while its interaction with TSA (TSA\*GIFMIS) is found to be statistically significant in curbing financial corruption in public sector in Nigeria.

**5.2. Conclusion**

It has been found from the study and result analysis above that Integrated Public Sector Accounting Standards (IPSAS), Treasury Single Account (TSA), Government Integrated Financial Management Information System (GIFMISS) if effectively complied with in all Ministries, Departments and Agencies can curb financial corruption and enhance accountability and transparency towards public fund, as well as Integrated Payroll and Personnel Information System (IPPIS) if effectively monitored can reduce payroll fraud which in the long run will also curb financial corruption in Nigeria public sector.

**5.3. Recommendations**

Based on the findings and conclusions of the study, the researchers recommend that;

- A. The government should install full designed GIFMIS in the operational structure of the nation’s public sector.
- B. There should be effective/efficient monitoring and sustenance of IPSASs, TSA, IPPIS and GIFMIS in the public sector, if Nigerian government is actually sincere and serious about tackling corruption in the country and stop cases of financial mismanagement, teaming and larding; and prepare financial statements that could make full disclosure of every material facts and figures.
- C. The government has to enhance/upgrade IPPIS to its fullest maximum to maximize its potential of curbing Payroll fraud.

**5.4. Contribution to Knowledge**

Our study contributes to the financial management reform literature in several ways. To be specific, our study makes two major contributions to the literature. First, this study is the first study to the best of our knowledge, to investigate the financial management reform adoption in curbing financial corruption in public sector, using four independent variables, tested as both stand-alone variables and interacted variables across public sector in Nigeria and the results are quite revealing.

First, when tested as stand- alone variables, the model specified as follows:

**MODEL 1: Stand Alone Variables**

$$COR_i = \lambda_0 + \lambda_1 IPSAS_i + \lambda_2 TSA_i + \lambda_3 IPPIS_i + \lambda_4 GIFMIS_i + \mu \dots \dots \dots (1)$$

Contributed to knowledge by revealing that:

$$COR_i = \lambda_0 + \lambda_1 IPSAS_i (5.724200\{0.00\}) + \lambda_2 TSA_i (2.936884\{0.01\}) + \lambda_3 IPPIS_i (1.042777\{0.32\}) + \lambda_4 GIFMIS_i (-0.775726\{-0.45.\}) + \mu \dots \dots \dots (1)$$

All the independent variables specified as shown above drives financial corruption in public sector in Nigeria positively, thus can help to reduce financial corruption in

public sector in Nigeria and they are statistically significant in driving them except IPPIS and GIFMIS. Although, IPPIS and GIFMIS are not statistically significant in curbing financial corruption in public sector in Nigeria, IPPIS had positive influence while GIFMIS had negative influence. Second, when we interacted our independent variables, which we specified the model as follows:

**MODEL 2: Variables Specified as Interacted Model**

$$COR_i = \lambda_0 + \lambda_1 IPSAS_i * \lambda_2 TSA_i + \lambda_3 IPPIS_i * \lambda_4 GIFMIS_i + \lambda_3 IPSAS_i * \lambda_4 IPPIS_i + \lambda_3 TSA_i * \lambda_4 GIFMIS_i + \mu \dots \dots \dots (2)$$

Contributed to knowledge by revealing that:

$$COR_i = \lambda_0 + \lambda_1 IPSAS_i * \lambda_2 TSA_i (7.784062\{0.00\}) + \lambda_3 IPPIS_i * \lambda_4 GIFMIS_i (1.515326\{0.15\}) + \lambda_3 IPSAS_i * \lambda_4 IPPIS_i (5.675045\{0.00\}) + \lambda_3 TSA_i * \lambda_4 GIFMIS_i (5.785610\{0.00\}) + \mu \dots \dots \dots (2)$$

Reveals that all the interactions (IPSAS\*TSA, IPSAS\*IPPIS, and TSA\*GIFMIS), except IPPIS \*GIFMIS have positive and significant influence in curbing financial management corruption in public sector in Nigeria. This is a Nobel findings and a strong contribution this study made to knowledge as all the prior studies we reviewed in literature richly concentrated on testing the independent variables as stand-alone variables. We therefore move knowledge a step further by interacting these variables to see what their joint effect will be and the findings is quite revealing as it is displayed above.

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